

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1- 70. (canceled)

71. (new) An arginine deiminase comprising arginine deiminase isolated from *Mycoplasma hominis* that has been modified by elimination of at least one pegylation site at or adjacent to the catalytic region of the polypeptide.

72. (new) The arginine deiminase of claim 71 wherein the arginine deiminase has been modified by deletion or substitution of at least one amino acid.

73. (new) The arginine deiminase of claim 71 covalently bound to polyethylene glycol.

74. (new) The arginine deiminase of claim 73 wherein the arginine deiminase is covalently bound to polyethylene glycol via a linking group.

75. (new) A composition comprising the arginine deiminase of any one of claims 71 to 74 and at least one carrier, diluent, or excipient.